

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A vacuum cleaner, comprising:

a casing having a certain internal space;

a suction force generating unit installed in the casing so as to generate a suction force;

a head unit connected with the casing ~~to so as to have cleaning implement and provide a flow channel for removing impurities outside;~~

a filter unit installed in the casing for filtering off impurities in air sucked from the outside;

~~a~~-flow channel switch means installed in the casing for selectively switching selecting a flow channel of the air flowing through ~~among~~one of a plurality of combinations of the head unit, the filter unit and the suction force generating unit; and

~~plural pipes for providing passages of air flowing through among~~connecting the head unit, the filter unit, the suction force generating unit and the flow channel switch means,

wherein the plural pipes include:

a head unit connecting pipe formed on a side of the flow channel switch means connected with the head unit;

a main inflow pipe installed between the flow channel switch means and the filter unit;

a guide pipe connecting the filter unit with the suction force generating unit;

a main discharge pipe connected to a side of the suction force generating unit for making air flowing from the filter unit into the suction force generating unit discharge to the outside; and

a sub-discharge pipe connecting the flow channel switch means with the main discharge pipe,

wherein the flow channel switch means includes:

a valve housing fixedly installed to the casing so as to have plural through holes connected to the head unit connecting pipe, the main inflow pipe and the sub-discharge pipe; and
a flow channel switch valve rotatively inserted into the valve housing so as to have plural channels connected to the plural through holes,

wherein the plural through holes of the valve housing includes a first through hole connected to the head unit connecting pipe, a second through hole connected to the main inflow pipe and a third through hole connected to the sub-discharge pipe, and the plural flow channels of the flow channel switch valve includes a first flow channel connecting the first through hole of the valve housing with the second or the third through hole of the valve housing and a second flow channel connecting the second through hole of the valve housing with ambient air when the first flow channel connects the first through hole with the third through hole of the valve housing.

2-4. (Cancelled)

5. (Currently Amended) The vacuum cleaner of claim 1~~claim 4~~, wherein the plural through holes of the valve housing are formed at an interval of 90 degrees from each other.

6. (Currently Amended) The vacuum cleaner of claim 1~~claim 4~~, wherein the first through hole of the valve housing is formed at an interval of 90 degrees from the second through hole thereof and the third through hole of the valve housing is formed at an interval of 180 degrees from the second through hole thereof.

7. (Currently Amended) The vacuum cleaner of claim 1~~claim 4~~, wherein the second flow channel of the flow channel switch valve is ~~formed so as to be vertical to in a direction different from~~ the first flow channel.

8. (Currently Amended) The vacuum cleaner of claim 7, wherein at least one of through holes formed on both ends of the second flow channel is directly ~~communicated~~communicated to ambient air.

9. (Currently Amended) ~~The vacuum cleaner of claim 2, A vacuum cleaner,~~
comprising:

a casing having a certain internal space;

a suction force generating unit installed in the casing so as to generate a suction force;

a head unit connected with the casing so as to provide a flow channel;

a filter unit installed in the casing for filtering off impurities in air sucked from outside;

flow channel switch means installed in the casing for selecting a flow channel of the air

flowing through one of a plurality of combinations of the head unit, the filter unit and the suction force generating unit; and

plural pipes connecting the head unit, the filter unit, the suction force generating unit and the flow channel switch means,

wherein the plural pipes include:

a head unit connecting pipe formed on a side of the flow channel switch means connected with the head unit;

a main inflow pipe installed between the flow channel switch means and the filter unit;

a guide pipe connecting the filter unit with the suction force generating unit;

a main discharge pipe connected to a side of the suction force generating unit for making air flowing from the filter unit into the suction force generating unit discharge to the outside; and

a sub-discharge pipe connecting the flow channel switch means with the main discharge pipe,

wherein the sub-discharge pipe is diverged from a middle portion of the main discharge pipe and is integrally formed with the main discharge pipe.

10. (Currently Amended) The vacuum cleaner of claim 1~~claim 3~~, wherein a part of the flow channel switch valve is exposed to the outside of the casing.

11. (Original) The vacuum cleaner of claim 10, wherein a knob is formed on the top surface of part of the flow channel switch valve exposed to the outside for facilitating handling of the flow channel switch valve.

12. (Currently Amended) The vacuum cleaner of claim 4011, wherein the knob projects from the top surface of the flow channel switch valve is projected formed so as to have a certain length and width.

13. (Currently Amended) A vacuum cleaner, comprising:

a casing having a certain internal space;

a suction force generating unit installed in the casing to generate a suction force and discharge sucked air;

a head unit combined with the casing to suck impurities on the bottom below the head unit with air by a suction force of the suction force generating unit or discharge ambient air sucked from the outside;

a filter unit for filtering off impurities in air sucked through the head unit or ambient air received from the outside;

a flow channel switch means connected with the head unit, the filter unit and the suction force generating unit so as to for selectively switch selecting a flow channel of the air flowing for guiding air including impurities sucked in through from the head unit by the suction force of the suction force generating unit to the filter unit or making from ambient air introduced in the flow channel switch means flow the filter unit to the head unit; and

plural pipes for providing passages of air flowing through among connecting the head unit, the filter unit, the suction force generating unit and the flow channel switch means,

wherein the plural pipes includes:

a head unit connecting pipe formed on a side of the flow channel switch means connected with the head unit;

a main inflow pipe installed between the flow channel switch means and the filter unit;

a guide pipe connecting the filter unit with the suction force generating unit;

a main discharge pipe connected to a side of the suction force generating unit for making air sucked from the filter unit into the suction force generating unit discharge to the outside; and

a sub-discharge pipe connecting the flow channel switch means with the main discharge pipe,

wherein the flow channel switch means includes:

a valve housing fixedly installed to the casing so as to have plural through holes connected to the head unit connecting pipe, the main inflow pipe and the sub-discharge pipe; and

a flow channel switch valve rotatively inserted into the valve housing so as to have plural channels connected to the plural through holes,

wherein the plural through holes of the valve housing includes a first through hole connected to the head unit connecting pipe, a second through hole connected to the main inflow pipe and a third through hole connected to the sub-discharge pipe, and the plural flow channels of the flow channel switch valve includes a first flow channel connecting the first through hole of the valve housing with the second or the third through hole of the valve housing and a second flow channel connecting the second through hole of the valve housing with the ambient air when

the first flow channel connects the first through hole with the third through hole of the valve housing.

14-16. (Cancelled)

17. (Currently Amended) The vacuum cleaner of ~~claim 16~~claim 13, wherein the plural through holes of the valve housing are formed at an interval of 90 degrees from each other.

18. (Currently Amended) The vacuum cleaner of ~~claim 16~~claim 13, wherein the second flow channel of the flow channel switch valve is ~~formed so as to be vertical to in a direction different from~~ the first flow channel.

19. (Currently Amended) The vacuum cleaner of ~~claim 16~~claim 13, wherein at least one of the through holes formed on both ends of the second flow channel is ~~contacted to in contact with ambient air~~.

20. (Currently Amended) ~~The vacuum cleaner of claim 14A vacuum cleaner, comprising:~~

a casing having a certain internal space;
a suction force generating unit installed in the casing to generate a suction force and discharge sucked air;

a head unit combined with the casing to suck impurities below the head unit with air by a suction force of the suction force generating unit or discharge ambient air sucked from the outside;

a filter unit for filtering off impurities in air sucked through the head unit or ambient air received from the outside;

flow channel switch means connected with the head unit, the filter unit and the suction force generating unit for selecting a flow channel of the air flowing from the head unit by the suction force of the suction force generating unit to the filter unit or from the filter unit to the head unit; and

plural pipes connecting the head unit, the filter unit, the suction force generating unit and the flow channel switch means,

wherein the plural pipes includes:

a head unit connecting pipe formed on a side of the flow channel switch means connected with the head unit;

a main inflow pipe installed between the flow channel switch means and the filter unit;

a guide pipe connecting the filter unit with the suction force generating unit;

a main discharge pipe connected to a side of the suction force generating unit for making air sucked from the filter unit into the suction force generating unit discharge to the outside; and

a sub-discharge pipe connecting the flow channel switch means with the main discharge pipe,

wherein the sub-discharge pipe is diverged from a middle portion of the main discharge pipe and is integrally formed with the main discharge pipe.